

WHAT IS CLAIMED IS:

1 1. An object distribution system for distributing access to objects,
2 wherein the objects reside on one or more computers attached to a network, the system
3 comprising:
4 a first computer in communication with the network; wherein the first
5 computer comprises:
6 a client program;
7 a distributor program;
8 a first object proxy, wherein the first object proxy is associated with a
9 first object resident on a second computer in communication with the network; and
10 a second object proxy, wherein the second object proxy is associated
11 with a second object resident on the second computer;
12 wherein the first object and the second object perform a function; and
13 wherein the distributor program selects between the first and the second object
14 to perform the function for the client program.

1 2. The system of claim 1, wherein the distributor program selects
2 between the first and the second objects based on a round robin algorithm.

1 3. The system of claim 1, wherein the first and the second object proxies
2 are maintained in a cache associated with the distributor program.

1 4. The system of claim 3, wherein the distributor program checks to
2 determine if the first object is available.

1 5. The system of claim 4, wherein the distributor program selects the first
2 object to perform the function for the client program only when the first object is available.

1 6. The system of claim 1, wherein the distributor program identifies the
2 first and the second objects as providing the function and associates the first and the second
3 objects in an object group.

1 7. The system of claim 6, wherein the distributor program identifies the
2 first and the second objects using a naming service.

1 8. The system of claim 1, wherein the first and the second objects are
2 CORBA compliant.

1 9. The system of claim 1, wherein the distributor program provides for
2 both fine and coarse balancing of object distribution.

1 10. An object distribution system for controlling load distribution during
2 access to objects resident on a plurality of computers attached to a communication network,
3 the system comprising:

4 a client computer attached to the network, wherein a client program is resident
5 on the client computer;

6 a first server attached to the network, wherein a first object is resident on the
7 first server;

8 a second server attached to the network, wherein a second object is resident on
9 the second server, and wherein the first and the second objects perform a function; and

10 a distributor program for receiving requests for the function and for selecting
11 between the first and the second object to perform the function for the client program,
12 wherein the requests are passed from the client program.

1 11. The system of claim 10, wherein the distributor function balances
2 access between the first and the second objects.

1 12. The system of claim 10, wherein the distributor function balances
2 loading across the first and the second servers.

1 13. The system of claim 10, wherein the distributor program identifies the
2 first and the second objects as providing the function and associates the first and the second
3 objects in an object group.

1 14. The system of claim 13, wherein the distributor program identifies the
2 first and the second objects using a naming service.

1 15. The system of claim 10, wherein the first and the second objects are
2 CORBA compliant.

1 16. The system of claim 10, wherein the distributor program provides for
2 both fine and coarse balancing of object distribution.

1 17. A method for balancing object and/or server loads across a
2 communication network, wherein the method comprises:
3 receiving a request for a function from a requesting program;
4 selecting an object to provide the function, wherein the selection involves
5 distributing requests for the function across a plurality of objects providing the function; and
6 providing a reference to the selected object to the requesting program, wherein
7 the requesting program can access the selected object to perform the function using the
8 reference.

1 18. The method of claim 17, wherein the requesting program is resident on
2 a first computer and the selected object is resident on a second computer, and wherein the
3 function is performed on the second computer and the results of the function are
4 communicated to the requesting program.

1 19. The method of claim 17, wherein the selecting the object to provide the
2 function is performed by a distributor program based on a selection algorithm.

1 20. The method of claim 19, wherein the distributor program is resident on
2 a computer where the requesting program resides.

1 21. The method of claim 19, wherein the distributor program selects an
2 object to perform the function from a group of objects which perform the function.

1 22. The method of claim 21, wherein the distributor identifies objects
2 which perform the function and associates the objects in the group of objects.

1 23. The method of claim 22, wherein the distributor queries a CORBA
2 compliant naming service to identify the objects that perform the function.

1 24. The method of claim 21 wherein the distributor checks each of the
2 objects in the group of objects to determine if the objects are available.
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